

## Dual Color LED Controller

Model No.: V2

2 Channel/Stepless dimming/Wireless remote control/Auto-transmitting/Synchronize



### Feature

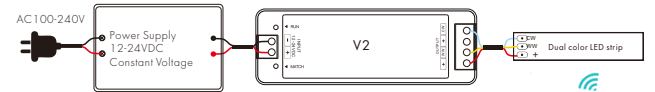
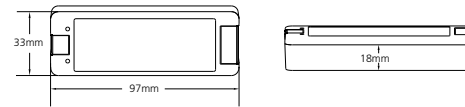
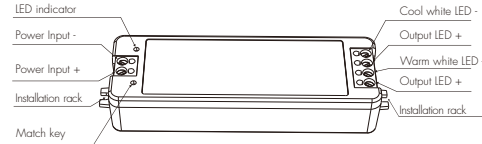


- 4096 levels 0-100% dimming smoothly without any flash.
- Match with RF 2.4G single zone or multiple zone dual color or single color remote control.
- One RF controller accept up to 10 remote control.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 30m control distance.
- Synchronize on multiple number of controllers.
- Fade in and out effect selectable.
- 3 levels color temperature (WW, NW and CW) selectable by continuous power off and on operation.

### Technical Parameters

Input and Output		Dimming data	
Input voltage	12-24VDC	Input signal	RF 2.4GHz
Input current	10.5A	Control distance	30m(Barrier-free space)
Output voltage	2x(12-24)VDC	Dimming gray scale	4096 [2^12] levels
Output current	2CH, 5A/CH	Dimming range	0-100%
Output power	2x(60-120)W	Dimming curve	Linear
Output type	Constant voltage	PWM Frequency	2KHz (default)
Environment		Safety and EMC	
Operation temperature	Ta: -30°C ~ +55°C	EMC standard [EMC]	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Case temperature (Max.)	Tc: +85°C	Safety standard [LVD]	EN 62368-1:2020+A1 1:2020
IP rating	IP20	Radio Equipment [RED]	ETSI EN 300 328 V2.2.2
		Certification	CE, EMC, LVD, RED
Warranty and Protection		Weight	
Warranty	5 years	Net weight	0.038kg
Protection	Reverse polarity Short circuit	Gross weight	0.049kg

### Mechanical Structures and Installations



Note: Continuously switch off and on the power supply two times rapidly, It will change 3 levels color temperature (WW, NW and CW) in sequence.



### Match Remote Control (two match ways)

End user can choose the suitable match/delete ways. Two options are offered for selection:

#### Use the controller's Match key

Match:

Short press match key, immediately press on/off key (single zone remote) or zone key (multiple zone remote) of the remote.

The LED indicator fast flash a few times means match is successful.

Delete:

Press and hold match key for 5s to delete all match, The LED indicator fast flash a few times means all matched remotes were deleted.

#### Use Power Restart

Match:

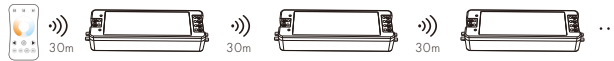
Switch off the power of the receiver, then switch on power. Repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinks 3 times means match is successful.

Delete:

Switch off the power of the receiver, then switch on power. Repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

## Application notes

### 1. All the receivers in the same zone.



RF remote

**Auto-transmitting:** One receiver can transmit the signals from the remote to another receiver within 30m, as long as there is a receiver within 30m, the remote control distance can be extended.

**Auto-synchronization:** Multiple receivers within 30m distance can work synchronously when they are controlled by the same remote.

Receiver placement may offer up to 30m communication distance. Metals and other metal materials will reduce the range. Strong signal sources such as WiFi routers and microwave ovens will affect the range.

We recommend for indoor applications that receiver placements should be no further apart than 1.5m.

### 2. Each receiver(one or more) in a different zone, like zone 1, 2, 3 or 4.



## Dual color control

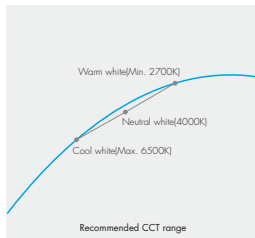
WW=Warm white LED

CW=Cool white LED

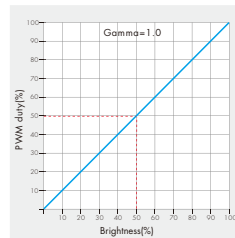
Each channel can supply up to 120W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	WW=0W,CW=120W	WW=60W,CW=60W	WW=120W,CW=0W

Linear dual color tuning



Dimming curve



## Fade in and Fade out Setting

Long press match key 5s, then short press match key 3 times.

The lighting effect will be set to the fade in and fade out in 3s, the indicator light of LED controller blinks 3 times.

Long press match key 10s, restore factory default parameter, the light on/off time restores to 0.5s.

## Malfunctions Analysis & Troubleshooting

Malfunctions	Causes	Troubleshooting
No light	<ol style="list-style-type: none"> <li>1. No power.</li> <li>2. Wrong connection or insecure.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the power.</li> <li>2. Check the connection.</li> </ol>
Uneven intensity between front and rear,with voltage drop	<ol style="list-style-type: none"> <li>1. Output cable is too long.</li> <li>2. Wire diameter is too small.</li> <li>3. Overload beyond power supply capability.</li> <li>4. Overload beyond controller capability.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce cable or loop supply.</li> <li>2. Change wider wire.</li> <li>3. Replace higher power supply.</li> <li>4. Add power repeater.</li> </ol>
No response from the remote	<ol style="list-style-type: none"> <li>1. The battery has no power.</li> <li>2. Beyond controllable distance.</li> <li>3. The controller did not match the remote.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace battery.</li> <li>2. Reduce remote distance.</li> <li>3. Re-match the remote.</li> </ol>